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One Little Pruning Book



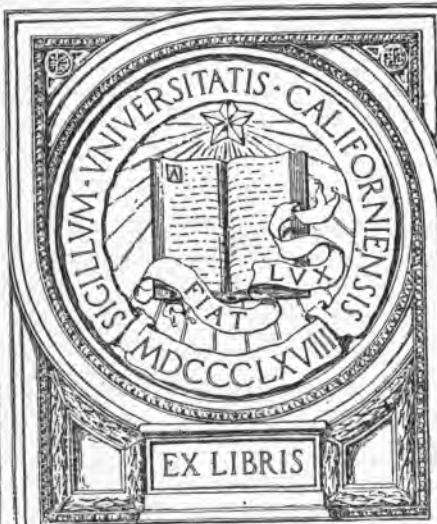
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The Little Pruning Book

AN INTIMATE GUIDE TO
THE SURE GROWING OF
BETTER FRUITS *and* FLOWERS

by
F. F. Rockwell



*Published in the interest
of Better Gardening by
The PECK, STOW & WILCOX CO.
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Foreword

A Little Parable About Pruning



[Figs do not grow upon thistles; neither good fruits upon the unpruned tree. He that would have fine flowers, such as are set before kings, let him apply his shears diligently, sparing not the old branches, neither the young growth, nor any part that should be taken away.]

THE long-legged son of farmer Grimes let down the bars, and drove the cattle toward home.

It was a mellow, belated autumn afternoon, and the green-brown world, flooded with a golden mist of light from the leisurely western sun, was good to look upon, and full of dreams. Out of his ragged pocket the boy drew a choice apple which he had been saving for this opportunity to enjoy it uninterruptedly. As he munched he dreamed, as every farmer's boy in a story should, that he would some day go to the city, and live to see famous the name he bore. The apple he devoured was so exceptionally good that instead of lasting him to the barn, as was usually the case, at the end of the lane it was all gone but the core, and that, with a sigh, he tossed over the rail fence.

Of the five seeds which fell with the core, the impertinent little chipmunk who lived in that corner found three. Dead leaves covered the other two; and the snow drifted over them through the winter; and in the spring they put forth leaves and twigs, and fought for existence with the wild choke-cherries and goldenrod which had taken possession of that spot.

In good time it came to pass that farmer Grimes, who was a careful husbandman, got around with his axe and bush hook, for he liked it not that brush should grow in his fence corners.

The first of the little apple trees he cut; and it fell across his boot. Being one who worked with his eyes

open and his wits about him, he noted the leaf. He adjusted his steel-rimmed specs and picked it up.

"What is here?" he said. "An apple among the cherry sprouts."

Now (to fall into the vernacular, which we hate to do), if thrift was a mole-hill, farmer Grimes would be a mountain. So he took the corn-cob out of his mouth, and leaning on his hook, looked again.

So it happened that the second little tree was spared.

But alas, how unfavorable was its environment! Years passed, but the little tree had a mighty hard time of it. It grew where the snow drifted, and many of its branches were broken off. It was handy as a source of switches for everyone who passed to let down the bars for the cattle; and many a promising shoot was cut off and trimmed up only to be broken about the hind legs of any animal that lingered on the way home. The cows themselves, as if in resentment for the part it played in their chastisement, took a passing "hook" at it whenever they got a chance.

More years passed. The little tree had begun to bear apples. The long-legged son of farmer Grimes had gone to the city to get a job in an office where he could wear a pink shirt and consider himself "some cheese". The county had prospered, moderately, until it now boasted on every barn on the way to town, its forthcoming first Big County Fair!

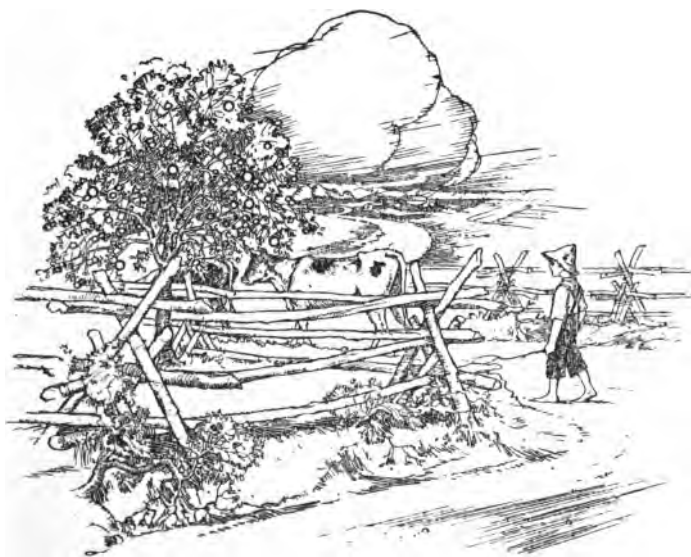
And among the local farmers, competition was especially keen for one entry on the premium list—"the best plate of apples, any variety."

Well, to trim our little story short, the blue card went to "Grimes Foundling" For all this was in the days before everyone knew the importance of pruning; and Chance had done for farmer Grimes what he didn't know—then—how to do for himself.

In the succeeding years many "whips" were cut from that wayside tree—but not to beat cows with. They went into other orchards for grafting, and made that section famous. And they brought the thrifty old farmer many an iron man, in those long-ago days when an I. M. could go to the grocery store and march home with

something more than nine pounds of beet sugar to its credit!

Moral: There is only one thing that pays better than having a sound knowledge of pruning: and that is—to USE it. The following pages are for you:





Why Prune?

The Reasons for Pruning; and What It Accomplishes

WHAT is pruning?

Every one knows, in a general way, what is meant by pruning. But to make perfectly clear at the beginning just what we are talking about, let us give the following definition:

Pruning is the removal from a plant of that part which is undesirable or superfluous.

In other words, pruning is one of the arts of the grower—or of the horticulturist, if you prefer! by which he or she obtains better results than nature, unassisted, would give. All of the arts of the grower are bent to one or both of two definite ends: to improve results, or to make them more certain. Pruning does both.

The gardener's work, in almost every thing he does, is to *co-operate* with Nature. To the extent he learns how to do this, his efforts will be rewarded by success. His problem really is to discover the things he can do that will actually be working with nature, and not counter to her way of doing things. The "improving on nature" which one hears much about is in reality merely lending her a helping hand, by following the tips she herself gives. When we interpret these tips correctly and are guided accordingly, it means successful gardening.

What can Nature show us about pruning?

Go out into the wood, or peer into the hedgerow down the road, and you will see that the Old Dame herself is the greatest pruner that ever came down the pike! Even in your garden, when you come to understand just what she is doing, you will see that she has attended to so much of the pruning herself that what is left for you to do is merely supplementary. But in the wood or the hedgerow it is easier to see how she takes care of the job. Every dead branch on a tree; every dead twig under your foot; is the result of the remorseless use of her invisible pruning shears. When you come to see

with a perceiving eye you will realize that among the silent growing things there is going on as savage and as ferocious a struggle for existence as ever took place among half-starved beasts in the jungle. The weaker shrubs or trees in each group or clump must succumb, and the struggle is continued among the branches of those which survive. Look at the full grown trees in a thick piece of woods: many without a branch for fifteen to thirty feet up. Nature is a pitiless pruner!

Then why not leave the job of pruning to Nature?

Because it means wasted effort on the part of the plant. It is part of the gardener's business to save the plant this unproductive effort. To do so means that the plant's energies, before wasted in civil warfare, can be devoted to the production of finer flowers, better fruits, or additional growth.

Moreover, while nature does the job of pruning thoroughly enough to serve her own purpose, which in most cases is the reproduction of the species, the gardener may have a different purpose in mind. Nature is, for instance, set upon the production of a large number of apple seeds, and is not concerned if the "fruits" in which they are borne, are small, bitter, and poorly colored. The gardener, on the other hand, wants to obtain large, juicy, and highly colored apples, and would be tickled to death to get them, if he could, with no seeds at all!

Actual results have shown that judicious pruning may not only accomplish these results, but actually add to the vigor and total growth of the plant pruned.

It is told of two Siberian crab apple trees, as near alike as one could possibly get them, set out under the same conditions. The next year (in February) one of these was pruned, and the other was not. The same season the pruned tree made fourteen feet more growth, and stouter growth, than the unpruned! This is only one instance, but it is representative of results which have been obtained repeatedly, both in experiments and in commercial work.

There is, in short, no doubt that intelligent pruning properly done is one of the greatest aids to the gardener in obtaining better flowers and fruits. The question is: when and how to do it?

The Gentle Art of Pruning

General Instructions

IT is as simple to give a number of rules for pruning as it is to give rules for other things, but the gardener who does not know some things about the *why* as well as the *how* of his work is never the progressive and increasingly successful gardener. Almost any rules, of course, are better than mere guess work; but rules which are *understood*, so that they will not be followed blindly in spite of conditions that should alter or suspend them, are much better.

Therefore, before attempting to formulate any rules on pruning, let us stop a moment to look into the way Dame Nature does the job; and examine how plants develop, and why they need pruning, before we attempt to interfere.

Plants develop through "buds." The bud is formed, usually rests for a while, and then resumes growth and develops into a new twig, or branch, which becomes part of the permanent structure of the plant; or produces flowers, followed by seeds or fruits.

What is a "bud?"

Look at the drawing FIG. 1, or better still go out and cut a branch or a sprouting twig from an apple tree, a shrub, a currant bush, or any plant that is convenient. You will notice along the sides, and at the tip, little swellings or pointed caps which are decidedly different from the wood to which they are attached. They will break or rub off

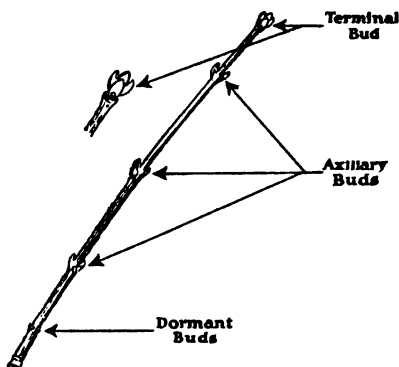


FIG. 1.
Young branch or shoot from a tree, showing the different kinds of buds. The strongest buds are at and near the tip.

readily, leaving only a slight mark to show where they were attached. If you open one and look at it under a magnifying glass, you may find, according to its stage of development and variety, miniature leaves, or even the parts of a flower, neatly packed away.

Even on the smallest twig, you will notice a decided difference in the appearance of the several buds. The one at the very end of the growth, which is usually the strongest, is called the *terminal* bud; those below it, situated in pairs or alternately, are called axillary buds, because they are formed in the axils of the leaves. You will notice, if you examine the buds on a number of different shoots, that the buds nearer the top on those growing vertically; and the buds on the upper surface of those growing horizontally, are stronger than those nearer the base, or on the lower surface. When growth is resumed not all of these buds will start out. A large percentage of them, especially the small or weaker ones, will remain dormant, and are known as *dormant* buds. If anything happens to the terminal bud either before or after growth is resumed, to injure or remove it—if, for instance, it is cut away—the bud or buds just below it will receive the nourishment meant for the amputated bud, and be greatly stimulated in their growth. In case of injury or removal of many buds, some of the “dormant” buds will become active—nature keeps them as a reserve supply, to be used only in case of necessity. But even these are not the last card she has to play. If, in turn, so many of these are injured or removed that the balance between the top of the plant and the roots is again upset, new buds may form at any point along the branch or shoots, or even on the main trunk or stem of the plant itself. These are called *advantitious* buds, and in their turn will carry on the work which the others were designed to perform.

It is evident then that by removing certain parts of the plant and, as it were, directing the energies thus interrupted into other channels, we can to a considerable extent control the plant's development. This is where Nature leaves off, and the gardener takes a hand; and after that the responsibility is up to the gardener.

The first step in any kind of pruning should be to determine definitely, in advance, *just what it is we want to accomplish*. Without that ideal in the mind's eye, to work to, we are not likely to do much better than Nature unassisted would do, and may bungle the whole job. All the different kinds of pruning there are to be done may be classed under the three following heads. Of course, two or three of these may be applied to the same plant, but they are distinct, nevertheless.

1. Pruning to increase general health and vigor.
2. Pruning to get a special form of growth.
3. Pruning to increase quantity or improve quality of the product.

1. PRUNING TO INCREASE GENERAL HEALTH AND VIGOR.—Pruning to be done for this purpose will depend very largely upon the kind of plant; some being benefitted by quite severe pruning, while others do better with hardly any at all. The first step in pruning for general health should be to remove all dead growth, and to cut all dying and diseased growth back to live healthy wood. The second step is to remove growth which is likely to injure or be injured by some other part of the plant, such as limbs in fruit trees which cross one another and rub together; tall canes in the rose garden which might whip about in the wind, etc. Thirdly, remove such *superfluous* growth as there may be,—that is, any parts of the plant which may not, for any reason, be needed to get the results you are after. In the case of most shrubs, climbing roses, and ornamentals, this includes old wood that is not yet dead, but which takes up sunlight and space that could be used to better advantage by the freer flowering new growth which is constantly struggling to take its place.

In addition to this the parts of the plant remaining should be pruned back to the extent which experience has shown to be desirable for the particular thing in hand. More detailed information concerning the different plants is given in the chapters which follow, but in general it may be said that:

Vigorous plants should be pruned LESS SEVERELY than weak growing plants

This seems at first something of a paradox, but the reason is plain when you stop to think about it. I have already spoken about the balance between root action and tops that must be maintained. If plants of vigorous root action are pruned too severely they either die, are seriously injured, or make so much and so rapid new growth that it is watery and abnormal in character, and unsuited to the gardener's purpose. In other words, there is a line beyond which no plant can safely be pruned; and this line is reached more quickly in the case of the plant of vigorous root action than in that of a weaker root action. Hence, the rule just laid down—prune strong growing plants *less* severely than weak growing ones.

It should be kept in mind, however, that this applies to plants in good health. Where the root action has been temporarily checked by disease, unfavorable conditions, or transplanting, severe pruning may often be resorted to with advantage.

2. PRUNING TO GET A SPECIAL FORM OF GROWTH.—Nature has her own habit of growth or "plant form" for every species and every variety that grows. Frequently, however, it suits the gardener's purpose to modify or entirely change this natural habit. In the case of fruit trees, he does it largely in order that they may be more easily cared for. In the case of hedge plants and many ornamentals, he does it to keep them within certain predetermined limits, or to get formal effects. Whatever his reason may be, there are certain things he must keep in mind to attain his ends. The first is that every plant, no matter how severely or often pruned, *tends to resume quickly its natural form*. The gardener should, therefore, plan to keep as near this as he can while still carrying out his own object. The second is that by removing the upper buds, or bud, the lower buds or growth will be stimulated; but that one or more of them will immediately make the effort to take the place of that which has been removed. If the top of a young tree is cut off, for instance, a new "leader" immediately makes the effort to take the place of it. This is important in the pruning of hedge plants and specimens, where a thick growth is wanted clear to the

ground. Merely cutting back plants which have been allowed to grow tall will not give the desired results, as the bottom will still remain straggly, while the plant endeavors to form a vigorous new top. The pruning should be begun early in the plant's life, and very low down, so that the desired thick growth is maintained from the bottom up. Thirdly, whatever tends to hinder the flow of sap from the roots to the upper parts of the plant will stimulate growth on the lower portions. For this reason, roses and other things which would be bare and unsightly at the bottom, if allowed to take their natural course, are often bent over to the ground to a horizontal position, and then given another bend to the upright nearer the end of the stem.

One of the apparent contradictions in pruning comes in at this point. In pruning the different parts of the same plant for the purpose of trimming, training, or getting a symmetrical specimen:

The more vigorous parts of the plant should be pruned MORE severely than the weaker growths.

By doing this, it is possible to divert the constructive energies of the plant to these weaker parts, and greatly stimulate their growth.

3. PRUNING TO INCREASE QUANTITY OR IMPROVE QUALITY OF PRODUCT.—Usually it is the quality and not the quantity which the gardener seeks in bettering nature. We want bigger apples, bigger peaches, bigger roses, and bigger dahlias, rather than more of them. Nevertheless we also resort to a form of pruning when we attempt to cheat nature into giving us more sweet peas, more summer roses, or a longer continued crop of certain perennials and annuals, than she would do if left alone. The theory of *pruning* to get bigger flowers and fruits is almost the same as that mentioned above—we divert part of the plant's energies, or vitality, from where it would naturally go, to where we want it to go. Only in this case, it is the strongest and most promising buds and growth which we seek to stimulate by sacrificing the weaker. Here, however, again we find a line beyond which we cannot go with safety, because if we prune too severely, nature revolts, and instead of giving us still bigger fruits or more gigantic blooms, will begin

to turn this surplus energy into a sudden new growth of wood and foliage; or get real peevish and quit altogether. Beyond a certain point the old Dame can be neither coddled nor blarneyed along.

So we begin to get an idea of what we can accomplish with our little pruning shears; and to realize the direction in which we can work and the fact that there are limitations beyond which we cannot go. The first thing, we may repeat, so that there will be less danger of your forgetting it, is to fix your ideal to prune to in each case, before the first snip is made. The second thing is to do your snipping in such a way that there will be the least possibility of injuring the plant. In other words, the pruner should be a good surgeon as well as a good diagnostician. And that we will take up in the next chapter.



How To Prune

The Wrong Way and the Right;
and Why the Latter is Worth While

WE have already said that pruning improperly done is worse than none at all. This applies not only to mistakes in pruning, too much pruning, or pruning at the wrong season, but also to a poorly done job. With plants, as with animal life, any wound is a danger spot, because it is a possible opening for the entrance of various diseases. Unless it is so made and cared for that it will heal quickly, it is almost sure to cause trouble sooner or later.

Practice alone, in pruning as in all other kinds of work, from dish-washing to piano-playing, can bring perfection. But in pruning there are many mistakes which even the novice can avoid, if he or she is fore-warned. The trouble is that any warning given on a printed page is likely to be forgotten, until it has been driven home by a lesson from that ungente but effectual school ma'am, "Experience." Therefore, to save yourself disappointment and loss where it is possible to do so, make yourself thoroughly acquainted with the suggestions given in this chapter, even if you have to read it over several times.

As a general rule, *the earlier in the development of the plant or limb, or shoot, the pruning required can be done the better.*

We have seen that one of the main objects in pruning is to conserve the energies of the plant that are wasted by the struggle for survival among its branches, using it either to increase the general vitality of the plant, or to direct it to some particular part of the plant where it would help along the design or end that the gardener has in mind. Wherever, therefore, it is possible, pruning should be done with the *thumb and finger!* In this way none of the plant's strength is wasted on growth which is merely to be cut away later. Besides this, the wound left is imperceptible and heals almost at once,

and the balance between the top and the roots of the plant is not upset. This finger pruning—in some cases called “dis-budding”—should be practiced a good deal more than it usually is. You are doubtless in the habit of removing the buds from your chrysanthemums to get larger flowers and of “pinching out” the surplus shoots on your tomato plants so that they will not attempt to bear more fruit than they can ripen quickly. Exactly the same thing can be done to many other plants, shrubs, and trees, thus saving the plant and yourself a lot of useless work.

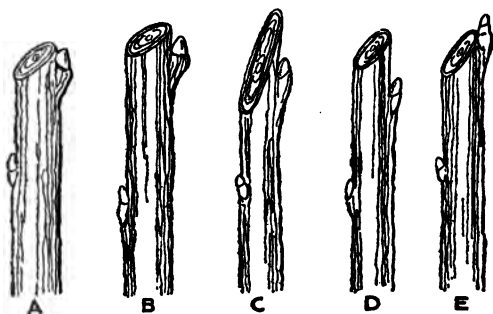


FIG. 2.

Making the cut in pruning: A—right for summer or green pruning; B—right for winter or dormant pruning; C—wrong, too slanting; D—wrong, too far from bud; E—wrong, too close to bud.

But most of your pruning, even if you are more careful than the average gardener about “nipping in the bud” superfluous and undesirable growth, will be done with the pruning shears. In using them, there are four things which you should always keep in mind. Eventually they will become second nature, but at the outset you should learn them by heart, so that you can check them off on your finger tips any time you ask yourself what they are!

FIRST—*Always leave a clean smooth cut.* Careless cutting or dull shears, leaving a ragged edge, means slow healing and increased danger—to say nothing about its being the earmark of a slovenly gardener.

SECOND—*Cut just the right distance above the bud.* If you cut close to it, it is likely to be injured. If you

cut too far above it, a dead stub will be left. On small branches and twigs, cut from a quarter to less than half-an-inch above the bud. If pruning is done when plants are in active growth, however, the cut should be made close to the bud, as it will heal almost immediately. The accompanying diagram illustrates how the cut should be made.

THIRD—Prune above an outside bud. This will tend to keep the new growth branching outward, giving the plant an open center with plenty of space and light.



FIG. 3.
Removing a large limb: result of wrong method, attempting to do it with one cut.

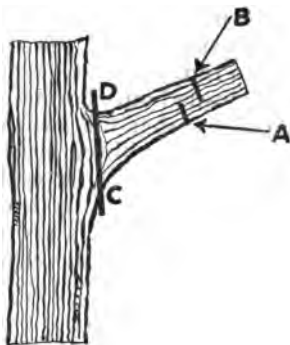


FIG. 4.
Removing a large limb: correct method, first cut at A; second cut at B; then saw off stub at C-D.

While in some specific case there may be reasons for selecting an inside bud, this holds as a general rule.

FOURTH—Cut close up to and parallel with the main branch, trunk or stem. In removing a branch from a tree or side shoots from shrubs or plants, the leaving of a stub, even if it is a short one, delays the healing or makes it possible for disease germs to enter, thus providing for future trouble.

Sometimes it is necessary to remove quite large branches. This should never be done, if it can be avoided, but with old trees that have been neglected, and in the case of limbs broken by ice storms, or through over-bearing, and from similar causes, there is nothing else to do. In such cases, the way that is the safest and

in the end the most convenient, is to remove the branch, first, lopping it off with an axe, and then sawing off the stub, a foot or so above the point where the pruning cut is to be made; then the final cut may be made clean and neat, just where you want it. With large and heavy branches there is the danger that it will break before the sawing is finished, and strip the bark, making a very serious wound. (See Fig. No. 3.) To prevent this, make a cut on the under side of the limb; then saw it off several inches beyond this, and remove the stub. (See Fig. No. 4.)

Much has been written about protecting large pruning wounds on trees. In cases where the center of the limb removed has decayed, leaving a cavity, this should be cleaned out thoroughly to sound wood, and lined with coal tar; then filled with cement. Sound wooded wounds over two or three inches in diameter should be covered with lead paint, or with tree paint made for this purpose, to within a half to three quarters of an inch of the circumference. This protects the center, which is the danger spot, and at the same time leaves clean bare wood for the new bark which should eventually grow in and cover the entire wound.

Pruning in the Rose Garden

Big Flowers, Many Flowers, or a Glorious Show; and How to Get Them

PRUNING is a more important factor of success with roses than with anything else you grow. There are a few sorts which will get along with comparatively little care but the majority of them, and especially the garden roses, will reward only the gardener who does not spare the pruning shears.

There are, however, roses of all kinds and descriptions, differing in their requirements and having possibilities of treatment in various ways, so that the inexperienced gardener will be lost unless he can get a few general principles of rose pruning fixed. I shall try in this chapter to straighten out this rose tangle so that any one who will follow the instructions given cannot go far wrong.

To begin with there are two things to be considered in pruning any rose. The first is the natural character or habit of the class or type to which it belongs; and the second is the result the gardener may wish to achieve—the finest individual flowers; the greatest quantity of good flowers; or the most striking show in his garden, or on the trellis or arbor, as the case may be.

To take the second of these factors first: With any individual plant you may follow one of at least three methods of pruning. *Severe* pruning will give you the finest individual blooms, the most perfect roses you can produce, under the conditions you have. *Moderate* pruning will give you many more blooms and quite perfect ones,



FIG. 5.

Spring pruning of hardy garden roses; the more severe the pruning, the finer the flowers, but there will not be so many of them. Cut illustrates medium pruning of strong-growing sort.

but they will not be so large, nor have such long stems, as you could get with severe pruning. *Light* pruning will give you more abundant bloom, larger plants, a continuous supply, and the most striking decorative effect in your garden or on your lawn; but the individual flowers will not be as fine for cutting, as they will be smaller, less perfect and have shorter stems. It is up to the gardener to decide which of these methods of pruning shall be followed. It is a matter of personal choice, which does not effect the general welfare of the rose garden. Where there are many roses probably all three methods will be utilized, so that there will be some extra fine blooms for the house and for giving away, and at the same time a glorious display about the grounds.

Before you attempt to prune any rose you should know to what type or class it belongs. Pruning on which some kinds would thrive would be fatal to others. If you know the names of the varieties you have, you can easily identify the type or class of each one by referring to any good rose catalog. After each name you will find an abbreviation, such as "H. P.," "H. T.," "T.," and so forth, signifying "hybrid perpetuals," "hybrid teas," "teas," or whatever it may be. A key to the abbreviations is usually given at the beginning of the list. If you do not know the names of the varieties you have you should by all means make an effort to identify them by the help of some friend when they are in bloom, or by a careful study of the catalogs. On each tag you should *mark the type or class*, as well as the variety, to guide you in your future pruning.

You will find that some varieties of the same type or class are much more robust than others. The weaker varieties should be pruned back more severely than the stronger ones. In all cases, as a general rule, you should cut from about a quarter to a half an inch above the outside bud or eye.

HYBRID PERPETUALS: Prune in March or early April; remove all weak growth and winterkilled wood. For *severe* pruning, cut stronger shoots back from eight to ten inches, or three or four buds, leaving only four to six branches. For *moderate* pruning leave six to

seven eyes; and for *light* pruning, cut back a third or so, and stake up loosely tall growing sorts.

HYBRID TEAS: Prune in April as soon as growth starts. Remove all weak growth and thin wood entirely, and cut stronger shoots back to eight to twelve inches.

TEAS: Prune in April, not so severely; cut out all weak wood and stronger shoots back to a good strong bud.

RUGOSA: Little pruning is required. Cut all old canes out every two or three years, and enough new growth to keep the plants from crowding. Plants may be trimmed back to any shape desired.

HARDY CLIMBERS AND RAMBLERS: In spring cut out dead and winter killed wood. In summer after flowering cut back severely, removing old wood to the ground, or main trunk, to get new strong growth of canes on which next year's flowers will be produced.

HYBRID SWEET BRIARS: Remove only surplus canes and trim lightly to keep in shape.

AUSTRIAN BRIARS: Prune as with hybrid perpetuals.

MOSS ROSES: Cut back sparingly in spring to trim last year's growth to shape; remove old canes.

In addition to this regular annual pruning the ever-blooming garden varieties should be pruned lightly after the first blooming period unless most of the flowers have been cut with long stems.

In *planting* roses, if dormant roots are used hybrid perpetuals should be severely pruned, back to three or four buds on each branch, as soon as they are set out. Hybrid teas and teas cut back to six or eight buds. Well established pot grown roses—which are the best to plant—will usually need no pruning, or only light pruning, when being set out, as they come ready to plant.

In autumn long canes or whips that have been sent up late in the season should be pruned back from a third to a half of their length to keep them from being whipped about in the winter winds.

Pruning in the Flower Garden

Getting Bigger Flowers, More Flowers, and Longer Seasons of Bloom

THE flower beds, including annuals and perennials, are with few exceptions allowed to take care of their own course without restraint or guidance on the part of the gardener. They can, however, be controlled as readily as other things, and the pruning shears and the fingers can be used to great advantage. There are, for instance, very few plants which cannot be made to give much finer blooms by judicious pruning.

Dahlias, chrysanthemums, both hardy and exhibition varieties, asters, and a very few others are often pruned or disbudded for this purpose, but the same treatment applied to many flowers, such as hardy pinks, antirrhinums (snap dragons), begonias, cosmos, heliotrope, zinnias, salpiglossis, etc., will produce as marked results. To get extra large flowers only a few stalks or branches should be left to each plant, and only a few buds, or one, to each stalk. Usually the terminal bud, or cluster of buds, is the strongest, and the others should be pruned off or pinched off before they have made such development.

With many plants, however, just the opposite treatment is needed. If left to themselves they will shoot up one strong straight stalk, bearing a few fine flowers at the top, while the side shoots amount to little or remain entirely undeveloped. This is especially true of seedling plants of many annuals, and when they have once flowered and borne seed, they are through for the rest of the season, having accomplished their purpose in life. Many annuals and tender perennials, such as asters, snapdragons, heliotrope, cosmos, stocks, petunias, marigold, etc., if the main stem of the young plant is pinched or cut off before the first top buds are developed, may be induced to branch freely and bear many more flowers than they would otherwise. In order to get as long a blooming period as possible from the various annuals and perennials, all flowers should be

kept cut off as soon as they begin to fade; pansies and sweet peas are two of the most striking examples. You should have a regular time every day, or at the least every other day, to go over the flower bed with your small pruning shears and snip off all blooms which are beginning to be *passee*.

In many cases a second crop of flowers can be had by a thorough pruning or cutting back, after the first crop is over. Removing half or even two-thirds of the top will induce a new growth to break out at the bottom from the remaining "stubs," which will grow rapidly and flower freely. Try this with your sweet peas and other annuals which seem to be "going by." If the soil is dry at the time, a thorough watering should be given, and another as soon as the new growth starts.

It is often desirable to keep plants at a certain height, or to make them conform more or less to a form shape, especially where they are used in hedges, lining out, etc. Most of the perennials and annuals will stand being cut to shape to whatever form may be wanted; but do not let them get full growth, and then cut them back. Begin your trimming early, to make them bushy and to give them a "good face," and let them gradually develop to the size wanted.



Pruning Shrubs, Trees, Hedges, and Vines

How to Get the Results Desired, and to Tell When to Prune

IT is perhaps hardly necessary to mention the desirability of "keeping up the place." Many persons, however, fail to realize the important part which the pruning shears play in preserving a neat, trim appearance at all times. Neglected trees and shrubs give a down-at-the heel effect, no matter how the walks, lawn, and flower beds may be kept.

Not only the general appearance, however, but the amount and the kind of blooms on your various shrubs, and the health and longevity of your trees, depend to a large extent upon their receiving timely and intelligent attention in this respect.

Before giving suggestions as to the care of the different classes of plants covered in this chapter, it will simplify matters if we define in advance a few of the terms which will be used. *Long pruning* and *short pruning* refer to the severity of the cutting. By "long pruning" is meant that more wood is left on the plant than is cut away, and by "short pruning," the opposite. From what has already been said in connection with the general principles of pruning and the pruning of roses, it is plain that, other things being equal, long pruning will produce a greater show of flowers, while short pruning produces fewer flowers, but these of exceptional quality.

Green or *summer* pruning and *dry* or *dormant* pruning refer to the condition of the wood or the season in which the pruning is done; the former indicating that the wood is cut while in active growth in the spring or summer, and the latter that the wood is cut when the sap is inactive in late fall, winter or very early spring. *Shearing* is the cutting back, usually not very heavy, to a uniform smooth surface. It is as a rule done with shears made especially for this purpose.

Old wood is that of several seasons growth, not necessarily beginning to die, but having passed the stage of most vigorous production of flowering shoots or foliage. "Surplus" wood is that which is over-crowding the plant, or stands in the way of the development of new growth, which will be increased by the space left by its removal.

Do not feel that the following suggestions must be followed blindly. The most prized thing that you can grow in your garden is individuality. The following "rules" are for the results which in most cases are generally sought. But if you wish to have your plants do for you things they are not generally made to do for your neighbors, by all means persuade them to follow your wishes if you can. Get the general principles clear in your mind, and you can make your own rules—that is the ideal toward which every wielder of the shears should work.

For the purpose of pruning, the ornamental shrubs should be considered in two general groups:

FIRST: Those which flower, usually in the spring or early summer, from buds on the wood of the previous season's growth, such as Deutzia, Weigalia, Forsythia, Lilac, and Viburnum. This group should be pruned green directly after flowering. By dormant pruning many of the buds would be sacrificed.

SECOND: Those which flower, usually during late summer or in early autumn, from buds on the current year's growth, such as Buddleia, Calycanthus, Hibiscus, and Philadelphus. This group should be pruned dormant before growth begins in the spring.

The following lists show the common shrubs belonging to each group.

SHRUBS BLOOMING ON LAST YEAR'S WOOD (Prune Green After Flowering)

Akebia
Aristolochia
Azaleas (Hardy Ghent, Mollis)
Calycanthus Floridus (Straw-
berry Plant)
Barberis (Barberry)

Bignonia (Trumpet Vine)
Celastrus (Bitter Sweet)
Cercis (Judas Tree)
Chionanthus (White Fringe)
Cornus (Dogwood)
Crataegus oxyacantha (Haw-
thorne)

Cydonia (Japan Prince)
 Deutzia
 Exochorda (Pearl Bush)
 Forsythia (Golden Bell)
 Hydrangea, Hortensis
 Jasminum
 Judzu Vine
 Lilac
 Lonicera fragrantissima (Bush
 Honeysuckle)
 Philadelphus (Mock Orange)
 Paeonia Moutan (Tree Paeony)

Prunus (Flowering Almond)
 Rhododendron
 Ribes (Flowering Currant)
 Roses, Climbing Varieties
 Sambucus, nigra (Golden Elder)
 Spirea Prunifolia (Bridal Wreath)
 Spirea Thunbergii
 Spirea Van Houttei
 Viburnum (Snowball)
 Weigalia
 Wistaria

SHRUBS BLOOMING ON THIS YEAR'S WOOD (Prune Dormant in Winter or Early Spring)

Actinidia (Silver Vine)
 Althea (Rose of Sharon)
 Buddlea (Butterfly Shrub)
 Calycanthus
 Ceanothus
 Clematis Jackmanii
 Clethra (White Alder)
 Desmodium
 Diervilla Canadensis
 Genista (Rock Broom)
 Hibiscus Syriacus
 Honeysuckle
 Hydrangea paniculata

Lycium (Matrimonial Vine)
 Rhus (Smoke Tree)
 Roses (Garden Bush Varieties)
 Rubus (Flowering Raspberry)
 Sambucus, pubens (Elder)
 Spirea Anthony Waterer
 Spirea Bumalda
 Spirea Douglasi
 Viburnum Tinus
 Viburnum Opulus (High Bush
 Cranberry)
 Vitex (Chaste Tree)

The following shrubs require very little pruning; merely the occasional removal of the broken or old wood:

Akebia; Andromeda; Lily of the Valley; Aralia; Angelica Tree; Artemisia; Azalea; Barberis; Chonanthus; Crataegus Pyracantha; Fiery Thorn; Cytisus Laburnum; Golden Chain; Daphne; Garland Flower; Kalmia, Laurel; Lonicera Tatarica; Magnolia; Mahonia; Rhododendron.

Most of the shrubs mentioned above can be used either as individual specimens or in the mixed shrubbery border. In the former case, they will need more attention in the way of pruning. For the shrubbery border a naturalistic effect is desired, and the different plants should be allowed to grow and intermingle freely.

HEDGES: In the pruning of hedges, on the contrary, it is usually a formal effect that is wanted. To get a good hedge, plants to be used should be set close

together—about four to twelve inches apart—while for the shrubby border they are put from two to three feet apart. Many beginners make the mistake of letting the hedge grow to the height desired before they begin to prune. To obtain a good “face” and to a hedge that is well filled out down to the ground, pruning should begin at once. Cut back severely when the plants are set, to induce a thick growth of low branches; and head in once or twice each year until the plants begin to attain their normal size, when they should be sheared semi-annually, or oftener. In some cases a formal hedge is not desired. Barberry, for instance, is much more attractive if allowed to assume its natural form, and in this case the plants should not be so near together. Many of the evergreens make excellent hedges, but

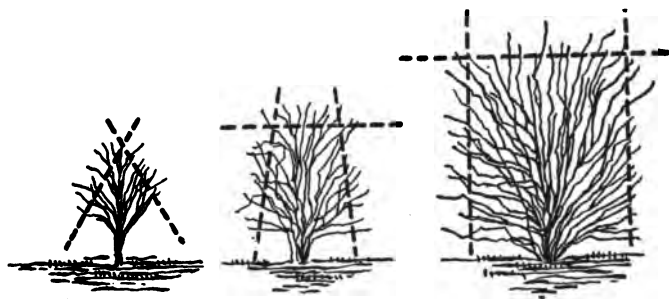


FIG. 6.
Cross-sections

Starting the formal hedge; begin with the young plant and keep new growth headed back several times a season until shape and size desired is attained.

they must be pruned severely and freely from the start, if one wishes a hedge and not merely a row of overcrowded trees.

EVERGREENS: Many gardeners who prune their other plants freely enough seem to be afraid to touch an evergreen, and the result is that one frequently sees misshapen specimens which could have been made symmetrical if they had been taken in time. Even if the top or leader of an evergreen is cut out, a new one will take its place and in a few seasons can hardly be distinguished, without careful examination, from the orig-

inal. This is also true of the side branches, and this fact can be used to good advantage by pinching off the leaders of over vigorous branches to stimulate the growth of the less vigorous. The growth of the stronger branches is not injured, as a new leader will take the place of the one pinched out.

SHADE TREES: In setting out ornamental and shade trees they should be treated during the first few years, very much as young fruit trees. In building up the skeleton which is to form the frame work of the future tree one should be careful to study the plant-form or natural habit of mature trees of the same variety, in order to know definitely what to plan for.

When the tree has once become well established, and approaches maturity, it will need very little attention in the way of annual pruning; but injured limbs should be carefully removed and all trees should be looked over carefully once a year, and given any attention in the matter of pruning, etc., that they may need.

HARDY VINES: The ornamental or flowering vines come under the same rule as the ornamental shrubs,—that is, those which flower from buds produced the previous season should be pruned immediately after flowering, and the others during early spring. For instance, *Wistaria* and *Clematis Jackmanii* should be pruned after flowering, while *Bignonia* and *Clematis Paniculata* may be pruned in the spring. The hardy vines need very little pruning except such as may be needed in training them to trellises, or into any desired form, and the occasional cutting out to the ground of old stems or stalks, to make room for vigorous new growth.

Pruning Fruit Trees, Dwarf Fruits and Trained Fruits

The Care of Young Trees and the Rejuvenation of Old

THE pruning required by your fruit trees is of three distinct types:

Pruning to form the young or growing tree.

• Pruning to re-form old trees.

Pruning to keep the trees in vigor, health and good bearing.



FIG. 7.
Young fruit tree (peach)
as dug at nursery. Prune
back roots to A-B.



FIG. 8.
Young fruit tree (peach)
headed back and pruned to
"whip" at time of planting.
"Head" is formed a year
later, similar to that in
Fig. 7.

PRUNING TO FORM THE GROWING TREE:
With the common fruit trees—apples, peach, pear, plum, cherry, and quince—pruning should begin at the time of planting. There are two methods, either one of which may be employed at the start. The first is, cut the newly set tree back to a "whip"—that is, all the side branches are cut off close to the main stem, leaving not more than three buds on each stub. In addition to this, the main stem is cut back from a quarter to a

third of its length. It may seem a crime to you to sacrifice all this wood from your little trees, which are none too big any way, but do not be tempted not to do so. This method should be used with one year old trees, and small slim trees.

The second method is to start the "head" of the tree when it is set. Three or four of the best of the branches are retained, but are cut back so that only from four to eight buds are left on each. The main stem is cut back to just above the uppermost of these selected

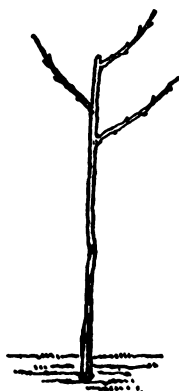


FIG. 9.

Young tree (apple) with head started at time of planting; branches evenly distributed both up-and-down and around trunk.

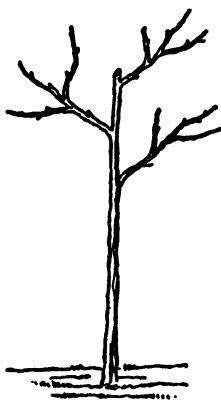


FIG. 10.

Young tree (apple) after second pruning; each branch treated much as though it were a young tree.

branches; and everything else is cut away clean to the main stem. As this method determines the ultimate form or shape of the tree, one must have a general idea as to just what type of tree is wanted. If the head is to be "low" the branches left should not be over two feet from the ground for apples and cherries and pears; and not over eighteen inches for peaches and plums. A point of the utmost importance in selecting the branches to be retained is *to see that no two of them form a crotch*—that is, they must not spring from opposite each other on the main stem. They should be distributed as evenly as possible along the stem and around it. As the main

stem is cut back to the topmost branch saved, a half to two-thirds of it is cut away—another seeming great sacrifice of wood which is, nevertheless, essential to success. For fruit trees to be grown on the lawn or in the garden, the “low” head is usually not desired. Therefore, the limb selected to form the future head of the tree need be only from two to three feet from the ground. The second method of pruning is adapted for two or three year old plants which, when received from the nursery, have good limbs from which to select those which are to be saved.

Early in the spring the year after planting, the second pruning should be given. In the case of trees that were cut back to whips (by the first method described above) select four to six of the best branches to form the future head, keeping in mind the points mentioned in the preceding paragraph. In the case of trees pruned by the second method,—i. e., to begin to form the head at once,—prune back the following spring one half of the new growth on the branches left before, and from two to four eyes on the side shoots. Remove back clean to the main stem all surplus branches that are not wanted.

The third annual pruning for the trees that were trimmed back to a whip, is to precede in the same manner as during the second pruning for trees that were trimmed to a head when set, as described in the preceding paragraph.

If the pruning for the first two or three seasons is done thoroughly, little pruning will be required thereafter. Cut back from a third to a half of the new growth each year, avoid making crotches; cut out intersecting limbs; and save laterals or branches that will tend to the formation or shape of the tree desired, according to the general principles discussed under the head “How to Prune.”

PRUNING TO RE-FORM OLD TREES: In the case of old trees, or fairly young trees that have been neglected, it is often necessary literally to cut away the whole top of the tree. The mistake is often made of trying to do this all at one pruning. The correct method is to cut away at first all the new young growth and sprouts except the comparatively few selected to make

the new limbs or the framework. Then about a third of the old limbs should be removed or sawed off, just beyond the point from which these new leaders spring, the work being done with great care as described under "Pruning in the Rose Garden." In the succeeding year or two years, the rest of the old limbs may be removed, and the new growth handled in the same way, as that on a new growing tree.

The general pruning of fruit trees which have been established, to keep them in vigorous growth and good bearing, is merely an application of the principles which we have already described. The different fruits vary a good deal in the amount and the kind of pruning they require, and their needs and how to meet them will be given in the following brief suggestions:

APPLES: Most varieties are of vigorous growth and need some pruning every year. Remove all superfluous growth in the middle and the top, which would tend to make the tree too tall or thick and bushy; do not cut off close side limbs on main branches, as they sacrifice fruiting wood, and leave the limbs, which gradually grow in length, bare.

PEACH: Aim to keep a low open-headed tree by thinning out interior growth. Winter injured wood and fruit buds may be cut back in early spring. More heading-in will be required on strong soil. Dead wood and weak wood, particularly in the summer, should be kept removed.

PEAR: Most varieties tend to grow in an upright condensed form and should be lightly thinned out every spring, cutting above strong outside buds where possible. Avoid heavy cutting back however. Keep new growths removed from main trunk and lower main limbs, so that in case of an attack by fire blight the infested portions can be cut away.

CHERRY: After the frame work of the tree is once formed, only slight pruning is needed. Most varieties are subjected to injurious cracks caused by sun and wind. If the top is kept low and spreading this will be to a large extent prevented. Fruit bearing is little affected by pruning, and as the trees do not tend to "run away" as pear trees do, the only pruning required after the

trees are once established will be to keep them in health and good form.

PLUM: Little pruning is required; the trees may be set closer together however, if they are headed back each year. A third to a half or more of the season's growth may be removed with little or no effect on the amount of fruit that will be produced the next season, and the trees, of course, will have a much more regular form.

QUINCE: Quinces on good soil make vigorous growth and the older wood should be kept thinned out every one or two years. Avoid cutting back all new growth at one time, however, as the result will be little fruit.

PRUNING DWARF AND TRAINED FRUITS: The amount of space available and other local conditions will determine whether you want to grow the trees in their regular form or train them near a wall or upon a trellis. In the latter case, the growth is induced to take a lateral form, as far as possible. Even with dwarfs the results will depend very largely upon the thoroughness with which the pruning is done, especially in the early stages of growth. To induce pyramidal form of growth, which is usually the best for dwarf trees it is necessary to cut back the main shoots or "leaders" quite low down thus inducing the more vigorous growth of the side branches, and leaving the tree at first with an open center. At the time of planting they should be shortened back about one-third in the usual way, and as soon as they become established the centers should be cut back to a height of ten to twenty inches. If vigorous growth is made, these side branches should be headed in, leaving four or five shoots on each. These will, of course, tend to an upright position in making their growth. The following spring these shoots should be cut back severely—half will not be too much if they have made a vigorous growth—and in case they should be too thick remove some of the side branches from which they sprout. This severe pruning should be continued for three or four years and the shoots should be gone over annually, early in the summer. All branches that crowd or cross should be cut out, and all those

that seem to be making too vigorous growth should be headed back in order that the tree may be kept symmetrical. For best results in the fruit there should be free access of air and sunlight to all parts of the tree. Each spring the annual growth of the year before should be cut back a third or more, as may be required to keep the trees in shape and as small as desired.

Where the trees are to be trained upon the trellis, a somewhat different system has to be used. In the first place they should be planted almost directly under it, that is so that the main trunk will grow close to the wires and not several inches away. After planting, when growth starts, the main trunk should be cut off a few inches above the first wire and three buds allowed to develop. One of these is trained along the wire on either side of the trunk and the third encouraged to make an upright growth as far as the next wire, where the same process is used; that is, three buds are left here, two of which are trained in either direction on the second wire, and the third bud which should be preferably on the opposite side of the trunk from the one below it, up to the third wire, etc. The shoots which start from the lateral branches should be kept cut back to four or five inches, saving only one out of every two or three so they will not be too close together. Every spring, as soon as the buds are well started, all those which are not desired should be rubbed off before they make any considerable growth, as this is not only very much easier but also saves the strength of the tree for the growth which is retained.

Pruning Small Fruits

Neglect in Pruning Causes Inferior Quality and Small Yields; How To Get the Best Results

IT is a true but a sad fact that plants which do not have to be coddled and looked after by the gardener in order to live at all, are likely to be neglected altogether.

Only too often this is the case with the small fruits. Being able to survive neglect and still produce annually small crops of under size and poor quality fruits, they are left to themselves, particularly so far as pruning is concerned, when a few hours attention a year with a good sharp pair of shears would double the quantity and more than double the quality of their yield.

GRAPES: The pruning of the grape is much more complicated than that of the other small fruits. The general confusion which exists in connection with pruning grapes is due to the fact that there are two different things to be accomplished: first, training; and in addition to that, pruning to get the best fruit.

To begin at the beginning, the vine when first set out should be pruned back even more severely than fruit trees, leaving the stub with one to three eyes. The roots of the plant will be much longer and more scraggly than those of a fruit tree and should be cut back, when received from the nursery, about a half. If there are roots above the real stem or base of the plant, they should be cut off close to the cane.

The subsequent pruning will depend primarily upon the method of training which is to be followed. If the plants are to be grown over an arbor or a trellis, or against a wall, the main cane or canes may be trained up in any way desired. Where a number of plants are to be grown in the garden primarily for the fruit, the method known as the modified Kniffin System is preferable. A stout wire is stretched five or six feet above the ground and the main stem or cane runs up to it,

and the laterals are trained along it. Another method is to have two or three horizontal wires at intervals of eighteen inches to three feet. Whatever system of training is used the general principles of pruning are the same, as follows: There are two main facts which must be constantly kept in mind in pruning grapes: the first is that *the fruit is borne only on shoots of the current year's growth, springing from wood or canes of the previous year's growth*; the other is that the grape vine, under culture, naturally *attempts to produce several times the number of bunches that it can fully mature*. This being the case, to get well ripened and large grapes every year you should prune as follows:

FIRST PRUNING: When planting cut back from two to three eyes, and when these sprout train up the one or two strongest to the support provided, removing the others.

SECOND PRUNING: The following spring, in February or March, leave only the best cane and cut back to three or four eyes.

THIRD PRUNING: At the point of the first support save only two canes; train these along the support; and remove all others. These "arms," branching from the main stem, furnish the frame from which the next season's bearing shoots will grow.

FOURTH PRUNING: The second spring, in February or March, cut these arms to eight or ten buds, for otherwise altogether too much fruit would set. The shoots which will sprout from these in the early spring are allowed *to hang down* instead of being tied to a support, and on these the fruit is produced.

FIFTH PRUNING: In the third spring, February or March, of the new canes on the arms trained to each wire of the trellis, *only the two nearest the main trunk* are saved. These are cut back to six to ten buds each; everything else should be cut away clean. The new canes are then tied to the wire.

SIXTH PRUNING: A similar pruning should be given every winter or in the succeeding spring, except that every two or three years two new canes from the main trunk may be saved at each wire, so that the old "arms,"

which are gradually getting too long, may be removed. These new canes are then handled in the same way as the ones which they are to replace.

For vines growing over an arbor or a tree, where the above system cannot be practiced, cut back all the laterals to within three or four buds of the main vine or vines, every winter or early spring.

In addition to this pruning, during the growing season all buds that start from the main vine and branches should be rubbed off.

CURRENTS AND GOOSEBERRIES

Currents are usually grown in the bush form, although they can be trained to other shapes. Currents and gooseberries fruit on wood that is two or three years old, but the first two or three crops are by far the best. You should aim, therefore, to keep the plants sufficiently open so that there is plenty of light, air, and sunshine, and so that the plant will not attempt to bear too much, with the result that what there is will be of the best. Secondly, plan to keep it constantly renewed. To do this, in pruning currents, cut out each year some of the old hard wood, and all the new growth except that wanted to replace the old that is removed. Thin sufficiently to keep the plant well open, and of course, remove all the shoots that are dead and those attacked by the borer. If the new growths are cut back during late summer they will ripen up better; and a general light heading back may be given to keep the whole plant in good shape. The *black* current does not need to be renewed as frequently; and, making a much heavier growth, can be developed into the tree form. Shoots attacked by the borer usually have a wilted appearance and should be cut and burnt at once.

The *gooseberry* is pruned in the same way as the current except that it is not necessary to renew the wood as frequently, and care should be taken to keep the plant from becoming crowded, as this increases the danger of the dreaded mildew. Do not prune, however, so that the fruit will be exposed to direct sunshine. Heading in the new growth during summer will help prevent

having too much fruit set near the top of the plant. Cut off all branches which droop to the ground.

THE CANE FRUITS

BLACKBERRIES, DEWBERRIES, RASPBERRIES, ETC.

At the time of planting, the cane fruits should be cut back to six to ten inches; the smaller the variety or the plant the less growth should be left. The subsequent pruning will depend upon the variety, and also upon the method of support, but in general the following prin-

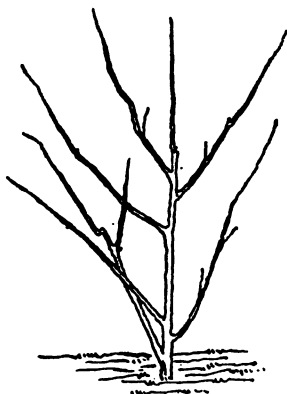


FIG. 11.

Cane fruit (raspberry) correctly pruned, ample bearing surface strongly supported.

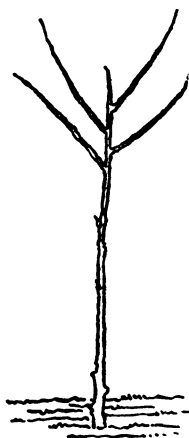


FIG. 12.

Cane fruit (raspberry) poorly pruned. Small yield, and in need of support.

ciples should be observed: The cane fruits bear on the growth of the previous season. The first things to remember then is *cut out old canes as soon as they have fruited*. This is better done as soon as possible after the crop is picked, though it may be deferred to fall or winter. Most varieties are over prolific in the production of new canes, and all but four or five should be cut out to the ground. Those saved for fruiting next year should, if they are to support themselves, be cut

back when three to five feet high. If they are supported they can make full growth and be cut back in the spring. Many varieties, especially most of the black raspberries or "black caps," fruit on the lateral or side shoots thrown out by the main canes, and these should be pruned back a third to a half early in the spring.

To sum up, in pruning the cane fruits: *First*, cut out old canes as soon as they have fruited; *second*, cut out down to the ground all but four or five of the new canes, the earlier the better; *third*, cut back the new canes and their side shoots a third or so in the winter or early spring.



Definitions

Horticultural Definitions of a Few Garden Words

A SLIGHT misunderstanding of garden words that are in everyday use may lead to confusion and misinterpretation. Following are horticultural definitions of garden words in common use:

ANNUAL—An annual is a plant that grows from seed, and dies root and branch with the perfection of its seed, all within the one period of growth. Practically and in garden use, however, many plants that are not annuals but which are treated as annuals inasmuch as they may be raised from seed and brought to flower within the year, are included in this group. *Salvia*, for instance, which is actually a perennial, is killed on the approach of frost.

BIENNIAL—A plant that takes two years to attain maturity. One that devotes its energies in the first year to the production of a plant from the seed and after one resting period (winter) starts into growth again for the purpose of producing flower and seed—and then dies. Some biennials, if started early enough in spring, will produce flowers late that same season, and so behave as garden annuals.

PERENNIAL—A plant that may live indefinitely. A plant that does not die after producing its seed, and in which the death of the flowering axis causes the development of offsets, and through the increase or spread of a plant, continues to live many years.

HERBACEOUS—A plant that does not make woody tissue. Hence a herbaceous perennial is a plant that makes a succulent growth each year and which, never becoming woody, dies down. The root in such a plant persists and carries on the life. Everything that dies down in winter and comes up again the following season, is a herbaceous perennial. A hardy perennial is merely an expression of relative hardiness in the climate in which the plant is grown.

HARDY—Meaning that the plant can endure the winter weather conditions under which it finds itself. A plant may be hardy or not hardy within a very short range, according to exposure, soil conditions, drainage, etc.

TREE—A woody perennial that arises from the ground on a single trunk or stem, thus differing from a shrub.

SHRUB—A woody perennial that arises from the ground by means of more than one stem from the root. According to the environments some plants may vary between different classifications. Thus the Summer Lilac (*Buddleia*), in the North, is regarded as a hardy herbaceous perennial; in the South, it becomes in practice a shrub. Another instance of a popular plant on the border line is Bush Clover (*Lespedeza*).

Around the Year with the Pruning Shears

Seasonable Work That Will Keep the Place Ship- shape and Give Better Fruits and Flowers

THE following brief suggestions or "reminders" are meant merely as hints to show you what to look for from month to month to do with your pruning shears. Directions for the work have already been given in the preceding chapters.

JANUARY-FEBRUARY: Winter or dormant pruning of fruit trees and large trees, especially removing dead and surplus wood, and reforming over-grown tops. Currants, gooseberries and grapes.

MARCH: Any of the above; *grapes* before sap starts. Shrubs and vines that flower on current year's growth. Hybrid perpetual and Rugosa roses.

APRIL: Any of the above except grapes. Hybrid teas and tea roses, as soon as the buds start.

MAY: Cut out winter-killed wood of all kinds. Prune earliest flowering shrubs as soon as they go by.

JUNE: Early flowering shrubs as soon as they go by. Keep undesirable new growth on young grapes and fruit trees *rubbed off*.

Head in and shape young growing trees.

Head in and guide, as necessary, trained fruits.

Pinch in the evergreens to get symmetrical development.

Trim or shear hedges, and formal-shaped shrubs and trees.

Cut or pinch back annuals and perennials to get more branching plants, or second growth.

Thin or disbud annuals and perennials to get larger flowers.

JULY-AUGUST: Any of the above.

Also prune hardy climbing roses when through flowering.

Cane Fruits when through bearing.

SEPTEMBER: As above.

Also head in strong new growth on both fruits and ornamentals, to induce better "ripening up" of the wood before winter.

OCTOBER: Get ready for winter; cut back rampant growths of canes, fruits, roses, etc.

NOVEMBER-DECEMBER: Winter or dormant pruning, especially of fruit trees, late flowering shrubs, etc.

Pruning Equipment

How to Select Good Pruning Shears and Their Care

PRUNING with dull tools is a thankless task—hard on both the garden and the gardener. The same work done with good tools is a pleasure and leaves smooth, clean cuts that look neat and heal quickly. One can hardly emphasize the importance of having efficient, sharp pruning shears as strongly as it should be emphasized. They make all the difference in the world between good work and bungling work; and hard work and pleasure.

Now as to the equipment necessary. It need not be either extensive or expensive. The first and most important item is a good pair of pruning shears. With them, and your fingers, you can do probably ninety per cent of the pruning to be done in your garden and about your grounds. With ordinary good care they will last for years. Therefore, *get the best shears you can buy.*

Here are the points to look for in a good pair of shears: (1) **EFFICIENCY**; correct design, so that you can get a quick, clean, smooth cut with a minimum of effort; (2) **GOOD MATERIAL**; insuring a long-lasting cutting edge, and protection from rust—a rusty blade, even if sharp, means poor work and blistered hands; (3) **ADJUSTING DEVICE**; the best of shears will “work loose” with wear, and unless the blades can be kept tight against each other they will not do good work, no matter how sharp and clean; the best shears have a ratchet nut by which they can be kept perfectly tight; (4) **CONVENIENCE**; select shears with a spring that can’t come out; and with handles that cannot close upon and pinch the fingers. See that the shears you buy come up to these tests, and you will get pruning-shear satisfaction.

In all but the smallest of gardens I would strongly advocate the use of *two* pairs of shears; a large 9-inch pair for regular heavy work, and a smaller 6-inch pair to be carried about constantly for every day use and the little jobs which would be forgotten if not attended to “on the spot” when they are seen. The shears that I use most are six inches long and weigh *four ounces*. The fact that they were sold as “Ladies’ Rose Shears,” or something of that sort does not make them less useful. They can be carried about in a hip pocket or an apron—never in the way—but always available!

All pruning tools should be kept in a dry place, and always *rubbed with rust-protecting oil or kerosene after being used*. This is not alone for looks, but is essential to good work. All joints and pivots, and springs should be kept well oiled. The cutting blades should be kept sharp, and *free from nicks*.

Keep your pruning tools in good condition and your pruning will take care of itself!

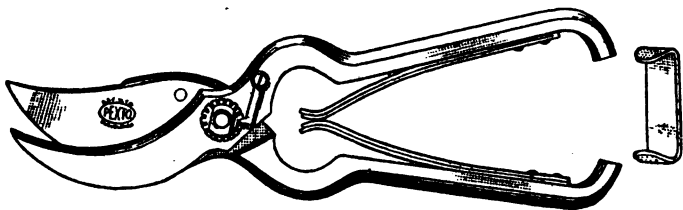
How to Get the Right Shears

Knowing the kind of shears to get is equally as important as knowing when and how to use them. This book would fall short in giving practical pruning service if it did not tell you the exact kind of pruning shear to get, where to get it and how to recognize it.

Therefore, in this division of the book you will find just the sort of shear information that will assist you in making practical use of the pruning directions given on the foregoing pages.

Tool making is an art which dates back to the early centuries. By skill in the making and skill in the using, mechanics' tools have reached a wonderful degree of perfection. Much tool history during the last 100 years has been written in the name of "Pexto." This trade name was adopted many years ago by The Peck, Stow & Wilcox Company, Southington, Conn., and Cleveland, Ohio. It covers a complete line of mechanics' tools and represents the highest quality in each kind.

In PEXTO Pruning Shears you will get the result of nearly a century of tool making experience. You'll realize the good points of Pexto Shears the first time you try them but you'll appreciate all the finer points with continued use. The following short description will assist you in selecting the right kinds for your purposes.

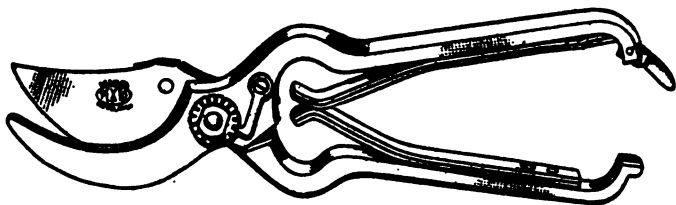


PEXTO No. R 85—9"

THIS is PEXTO Swiss Pattern Pruning Shear, full polished, which originally became popular in the vineyards and rice fields of this country, and later grew to general popularity owing to its great strength, adaptability for heavy work, long usage, and easy cutting qualities.

It is in every respect a high grade Pruning Shear, of unusual quality, combining fine material, expert workmanship and correct design. The blades are made from the best crucible steel, ground convex and specially tempered.

This Shear has the regulating ratchet nut, longitudinal double brass springs, and removable handle clip; in fact every desirable feature for the user. It is highly recommended and fully guaranteed.



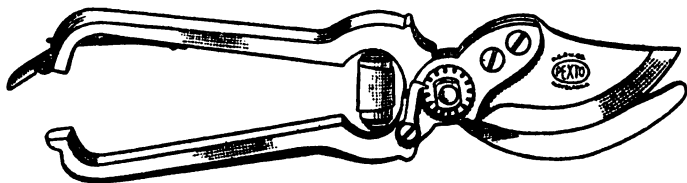
PEXTO No. R 165—9"

THIS is PEXTO California Pattern Pruning Shear which has become extremely popular in the United States and foreign countries.

The handles are somewhat lighter than the Swiss Pattern, shown above, making it very desirable for home gardening.

It fits the hand perfectly, and with the double longitudinal brass springs, operates freely. This style Shear is made from the very best material with blades of best crucible steel, correctly tempered, having long bevel which, with properly arched hook, makes it an easy cutter.

This Shear has the regulating ratchet nut and an attached end fastening clip, which cannot be lost or misplaced. It is full polished and nickel plated, all excellent features in Pruning Shear construction. Fully guaranteed.

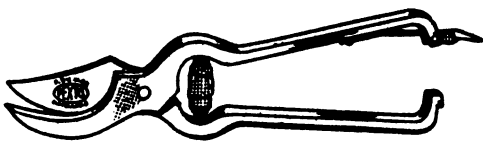


PEXTO No. R 170—9"

THIS Shear was especially designed for parties who like a good size, wide blade, and is also made of the very best materials, many people claiming that it cuts easier in their hands than any other style they have ever used. For that reason, its popularity continues to grow.

This style is made with a volute spring, which is also desired by parties who lean to this particular style. It has the regulating ratchet nut, end clip fastening arrangement, is full polished and nickel plated.

Fully Guaranteed.



PEXTO No.14—6"—Ladies Pruning Shear

Also styled Rose Shear

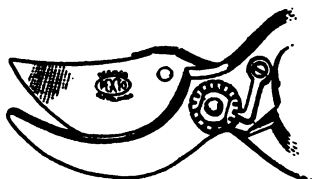
THIS is a very attractive and desirable little Shear to have in your home; especially adapted for trimming roses and other flowers in the garden, as well as light branches of any description.

It is made of the best quality steel, properly tempered, full polished and nickel plated. It has a volute style spring, which is exactly proper for a Shear of this nature.

The long bevel of blade and properly arched hook in this Shear as well as the other features mentioned above, make it an easy and clean cutter.

A pair of these will save the scissors, which have often been spoiled in trimming rose vines and bushes.

This Shear is fully guaranteed.



What the Regulating Ratchet Nut on a Pair of Pruning Shears Means to Your Satisfaction

BLADES and handles of a cutting instrument held together by a bolt and nut will eventually work loose. At first, adjustment can be made by tightening the nut, but use loosens it again and in time the blades will again work apart. A ratchet-nut, however, is tightened when wear is evident, and the pawl slipped a notch or two ahead of the original notch. Thus the blades are always held in close and firm adjustment.

The ratchet pattern pruning shear is always worth the small difference in price over the ordinary bolt and nut type.

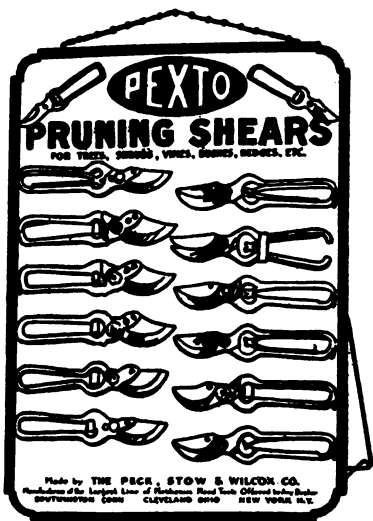
In using pruning shears, remember that they are not intended to cut hard or dry wood.

Where You Will Find PEXTO Pruning Shears

BEST hardware dealers the country over are familiar with this trade name. Your dealer no doubt will have many kinds of PEXTO Household Tools besides the Pruning Shears.

Look for the display illustrated at right. You can't miss it. It shows several other styles of shears in addition to those described in this book.

There are shears for every purpose shown on this display, at prices to suit. Look for the "PEXTO" Stamp on Pruning Shears and on the household tools you buy. It is a "safety first" mark of every tool purchaser.



Conclusion

A Word to the Wise Gardener

If you want bigger flowers;

If you want more glorious roses;

If you want finer fruits;

If you want neater hedges, and more attractive grounds;

If you want a more *valuable* home—for appearances go a great way in fixing the market value of a place;

If these things seem to you worthwhile;—why then its up to you to be Johnny-on-the-spot when it comes to pruning!

Begin now—the season of the year is a secondary matter. Do what can be done this month, this week, to get your place into shape. If it has been neglected in the matter of pruning, you will find that your efforts will make more difference in the general looks of things than anything else you ever did, next to painting the house. And the pruning will cost you but a few dollars at most. After you get the few simple tools needed, it will cost nothing but the pleasurable effort of doing it.

Hie you, therefore, if you are still one of the benighted, to the nearest good hardware store, and get the things you may need to start the campaign.





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